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June 28, 2019

Via ECFS

Lisa Fowlkes, Chief
Public Safety and Homeland Security Bureau
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

Re: *In the Matter of Improving Wireless Emergency Alerts and Community-Initiated Alerting, Amendments to Part 11 of the Commission's Rules Regarding the Emergency Alert System*, PS Docket Nos. 15-91, 15-94
Letter from Lisa M. Fowlkes, Chief, Public Safety and Homeland Security Bureau to William H. Johnson, Sr. Vice Pres., Verizon, of June 5, 2019

Dear Chief Fowlkes:

Thank you for your June 5th letter asking about the status of the Commission's important enhanced geo-targeting rule for delivery of Wireless Emergency Alert (WEA) messages. The Commission's 1/10th of a mile standard remains technically feasible, with the November 30, 2019 deadline proving to be a challenge because of the extensive coordination required of relevant stakeholders.[1] We are working hard to meet the standard by the deadline, and are cautiously optimistic that network-level upgrades in our control can be completed before November 30, 2019. At this stage, the most significant challenge to meeting the deadline appears to be availability of compatible devices, though we are awaiting information from device manufacturers whether they can expedite availability. Here is a timeline of our progress and a plan for continuing work:

- ***Technical Standards.*** Verizon worked closely with representatives of other wireless providers, vendors, FEMA and other stakeholders in the ATIS process to develop new standards that comply with the amended rule. The ATIS standards process began shortly after the Commission adopted its rules in early 2018, and ran concurrently with ATIS's finalization of standards for the also important 360 character limit, Spanish-language alerts, and state/local testing requirements. As detailed below, incorporating the new enhanced geo-targeting capability is a complex technical endeavor at the device level. Stakeholder input on the draft standards, and on proposed changes to them, were

[1] *See, e.g.*, Letter from William H. Johnson, Verizon, to Marlene H. Dortch, Secretary, Federal Communications Commission, PS Docket No. 15-91, Jan. 23, 2018.

submitted and debated through most of the remainder of 2018. The changes affecting 3GPP specifications were submitted to 3GPP for approval in late 2018, which adopted them shortly thereafter (the following January). 3GPP adoption, in turn, enabled ATIS to complete the standard for use in the United States. The final standards were submitted for the ballot on March 29, 2019 and the standards approved for publication May 3, 2019.

The standard thus was completed for balloting in just over a year from start to finish—a considerable achievement given the challenges involved in developing a new capability from scratch that addresses multiple stakeholder concerns. But the technical standards still were not finalized as quickly as Verizon had hoped in order to meet the aggressive deadline set by the Commission. ATIS members were able to determine fairly quickly (by mid-2018) how to handle the transport of the alert message (via the SIB12 IE). Other critical factors, such as the format for messages and how to handle device location uncertainty, took longer. The delay was principally driven by ATIS's standards development process, which opens the drafting and discussions to solution providers[2] and other stakeholders. This open process allowed the standards body to consider important capabilities not required by the Commission's rules but that promote the Commission's public safety goals. For example, public safety stakeholders urged that the new standard address situations in which a device is outside the alert area polygon when the alert is initially broadcast but moves into the polygon shortly after (the so-called "roving user").[3] We agree that consumers would benefit from that capability, so ATIS agreed to take on the additional complexities to tackle the issue. In fact, ATIS reviewed over 15 different proposals for enabling this capability alone before ultimately reaching a consensus approach. Addressing public safety's input at the outset may have added some time to the process, but resulted in a better technical standard that will ultimately improve consumers' and alert originators' experience. Incorporating this capability also helps mitigate the need to later modify the standard on a piecemeal basis.

- ***Handset Manufacturers.*** We have confirmed with Qualcomm that its newest model chipsets incorporate the new technical standard and are available to device manufacturers for purchase. We have also formally requested that handset manufacturers incorporate the new technical standard into their devices. Specifically, we submitted requests to the device manufacturers in April 2019 (before standards were approved for publication), and again (after standards were published) in June. As of today, we are awaiting final word from them as to when they will provide capable devices with the new capable chipsets. Given our prior experience with new handset upgrades of this level of complexity, unless

[2] *See, e.g.*, ATIS Ex Parte Letter, June 26, 2018 at 2 (describing consideration of alternate solution).

[3] *See* New York City Emergency Management Agency Comments, PS Docket No. 15-91, at 5 (Sept. 19, 2018).

the handset manufacturers are able to accelerate their processes, we may not receive compliant handsets to conduct end-to-end testing until late 3Q 2019 (or later). The timing of receiving devices for testing directly impacts our ability to meet the Commission's deadline.

- ***Next Steps.*** Once equipment manufacturers are able to provide capable handsets for testing, there are two final interrelated implementation steps: (1) incorporating any necessary updates to Verizon's wireless network; and (2) inserting the new geo-targeting capability into new handsets for sale to consumers.

    - Network Implementation. We hope to begin testing network software in the lab environment by September 2019. We will begin testing capable devices as soon as they are available from handset manufacturers. Once testing is complete, we estimate that we could finalize any necessary network-level upgrades/changes as early as October 2019 (again, subject to device availability for testing). If testing is successful *and* handsets are available early enough to complete testing, our network could have the capability to support wireless emergency alerts with mobile based geo-fencing by the November 30, 2019 date. We intend to do everything within our control to meet that date.

    - Handset Availability. Of course, consumers' ability to benefit from service providers' new alert delivery capabilities will depend on the availability of capable handsets. Once testing is complete—and if testing is successful—we estimate that equipment manufacturers could begin delivering compliant devices to us for consumers approximately three months later, and we would begin marketing them directly to customers shortly thereafter. We are hopeful that device manufacturers will enable us to expedite this timetable, and we will do so if possible. But given the above uncertainties concerning device availability, it is likely that capable handsets will not be available to consumers until after November 2019.[4]

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[4] For consumers to benefit from the new alerting capabilities, it will also be necessary for alert originators to deliver the targeted polygon in a permissible format, and for FEMA's IPAWS gateway to process the information. FEMA is currently implementing its own capabilities for 360-character and Spanish language alert content, and Verizon is not aware whether similar changes in IPAWS will be necessary for enhanced geo-targeting.

Again, we anticipate receiving additional information from equipment manufacturers about the timing and availability of new standards-compliant devices soon. That information will enable us to provide a more definitive timetable, and to confirm whether capable devices will be available to consumers before November 30, 2019. We will keep you updated as that information becomes available.

Sincerely,

William. H. Johnson
Senior Vice President, Verizon

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